



## FHWA R&T Program Development

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## Transforming FHWA's R&T Program/Three Causes

- Agency's 2002 Restructuring Assessment
- TRB RTCC Special Report 261, *The Federal Role in Highway Research and Technology*
- GAO report 02-573, *Highway Research: Systematic Selection and Evaluation Processes Needed for Research Program*



## Recommendations Restructuring Assessment

- Strengthen the definition of priorities.
- Designate a champion for technology deployment.
- Clarify the deployment process.
- Increase corporate ownership, coordination, and commitment for delivering technology and innovation.



## Recommendations RTCC Special Report 261

- Focus on fundamental, long-term research.
- Undertake research to address "significant highway gaps" and emerging issues with national implications.
- Be more responsive to major stakeholders and balance stakeholder problem identification with expert external technical review.
- Include external stakeholders and technical experts on merit review and evaluation panels.
- Subject the UTC's program to the same guidelines as the FHWA R&T Program.
- Support Future Strategic Highway Research Program.



## Recommendations GAO Report 02-573

- Adopt a systematic approach for obtaining input from external stakeholders
- Develop a systematic process for evaluating significant ongoing and completed research that incorporates peer review or other best practices in use at Federal agencies that conduct research



## Implementing the Recommendations

FHWA initiated a move in a new direction through:

- Development of a Corporate Master Plan for R&T
- Establishment of an R&T Leadership Team (comprised of Associate Administrators and representatives of the field)
- Continued consultations with the TRB RTCC

FHWA's approach was also incorporated into the Administration's reauthorization proposal and is reflected in Title V of SAFETEA-LU.

## The Corporate Master Plan

### The CMP is framed around 7 guiding principles

- The FHWA R&T process, from research through implementation, is systematic and begins with the end in mind.
- FHWA engages in advanced and applied research, and innovation deployment activities where there is an appropriate Federal role.
- Stakeholders are engaged throughout the R&T process.
- The R&T process is grounded in the FHWA mission and goals, and guided by multiyear plans.
- The R&T budget allocation is based on and driven by multiyear plans and priorities
- FHWA measures the performance of R&T on the Agency, program, and project levels.
- FHWA effectively communicates its R&T Program and projects.

## New Initiatives

- Multi-year program plans (roadmaps) developed with stakeholder input and tied to agency goals
- Market-Ready Technologies and Innovations
- Performance Measures
- Lab Assessment Program

## What obstacles did you face?

- Resource Constraints
  - Funding
    - Amount of \$
    - Limitations on the use of \$
  - Staff time
- Stakeholder Engagement
  - Outreach to non-traditional stakeholders (how to)
  - Raising Expectations
  - Balancing views of conflicting stakeholder groups

## What strategies did you find successful?

Communicate, Communicate, Communicate!

- Engagement of TRB RTCC
- Outreach to broader stakeholder community
- Use of expert technical panels at both program and project levels
- Partnerships with State DOTs, UTCs
- Lab Assessment Program

## What benefits do you see?

- Relevance to Agency Mission and Stakeholder Needs
- Improved Quality and Focus of Research
- Increased customer and stakeholder confidence in the conduct of research and the outcomes produced
- Greater likelihood of technology transfer and implementation
- Support for reauthorization

## What challenges do you still face ?

Funding Limitations

- Limited Funds
- Earmarks and Designations limit ability to program funds across program areas or in response to new or emerging issues
- Lack of funds for certain activities (a.k.a. "orphans") such as policy research, support for TRB, TFHRC, etc.



## Most Noteworthy Program Element

Exploratory Advanced Research Program

- newly authorized in SAFETEA-LU
- authorized at \$14 million/year
- to develop partnerships with public and private sector entities
- focus on longer-term, higher-risk research with potential for dramatic breakthroughs